Inside Wallops

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Goddard Space Flight Center
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A Step Closer to First Flight Test of Next Crew Launch Vehicle

NASA is a step closer to the first flight test of the rocket that will send humans on their way to the moon as part of the agency's Constellation Program. Rocket hardware critical for the Ares I-X test was completed last week at NASA's Langley Research Center.

The flight of Ares I-X will be an important step toward verifying analysis tools and techniques needed to develop Ares I, NASA's next crew launch vehicle.

The Langley-designed and built hardware is engineered to represent the Orion crew module and a launch abort system that increases crew safety. The rocket elements are scheduled to be shipped from Langley to NASA's Kennedy Space Center this week. This hardware and other elements from around the country will be integrated into the Ares I-X rocket, the first in a series of unpiloted test vehicles.

The test launch is currently scheduled from Kennedy Space Center in July 2009. During a two-minute flight, the vehicle aerodynamics, controls and performance of the rocket's first stage will be measured. The launch will culminate with a test of the separation of the first stage from the rocket and deployment of the accompanying parachute system that will return the first stage to Earth for data and hardware recovery.

NASA Wallops Flight Facility, Near Earth Network Services (NENS) will provide engineering and operational support services for the upcoming ARES 1-X launch. Wallops personnel will build, test, install and operate three telemetry receive and record racks. The racks will receive, process and record four AQPSK links. One Operational Flight Instrumentation link and three Demonstration Flight Instrumentation links also will be forwarded to Cape Canaveral Air Force Base for mission display and decision-making. Two racks will be located at Cape Canaveral Telemetry Tracking Facility. The third rack will be located at the Jonathan Dickinson Missile Tracking Annex, 95 miles south of the Cape near Jupiter, Florida.

NASA Langley Photo

Stacking the Ares I-X crew module, launch abort system simulator.

"This launch will tell us what we got right and what we got wrong in the design and analysis phase," said Jonathan Cruz, deputy project manager at Langley for the Ares I-X crew module and launch abort system. "We have a lot of confidence, but we need those two minutes of flight data before NASA can continue to the next phase of rocket development."

The simulated crew module and launch abort system will complete the nose of the rocket. About 150 sensors on the hardware will measure aerodynamic pressure and temperature at the nose of the rocket and contribute to measurements of vehicle acceleration and angle of attack. The data will help NASA understand whether the design is safe and stable in flight, a question that must be answered before astronauts begin traveling into orbit and beyond.

For more information about the Ares I-X test flight and the Constellation Program, visit: http://www.nasa.gov/mission_pages/constellation/ares/flighttests/aresIx/index.html

We remember and honor their legacy .....

Apollo 1 – On Jan. 27, 1967, a flash fire occurred during a launch pad test of the Apollo/Saturn vehicle. Astronauts Virgil Grissom, Edward White and Roger Chaffee died in this tragic accident.

Challenger – On Jan. 28, 1986, the space shuttle Challenger's crew died in the explosion of their spacecraft 73 seconds into the flight. The crew included Mike Smith, Dick Scobee, Ron McNair, Ellison Onizuka, Christa McAuliffe, Greg Jarvis and Judity Resnik.

Columbia — STS-107, space shuttle Columbia lifted off on Jan. 16, 2003. Upon reentering the atmosphere on Feb. 1, 2003, Columbia suffered a catastrophic failure. The orbiter and its seven crew members - Rick Husband, William McCool, David Brown, Laurel Clark, Michael Anderson, Ilan Amon, and Kalpana Chawl - were lost approximately 15 minutes before Columbia was scheduled to touch down at Kennedy Space Center.

NASA College Scholarship Fund

The NASA College Scholarship Fund has announced its 2009 agency-wide call for applications.

The NASA College Scholarship Fund, Inc., is a non-profit organization that awards scholarships to qualified dependents of current or former NASA employees pursuing a course of study in science or engineering fields.

Up to five scholarships will be awarded in the amount of $2,000 each in this 27th year of the program (2009-2010 school year). The scholarship is renewable for a maximum of $8,000 over 6 calendar years.

Further information and applications are available at: http://nasapeople.nasa.gov/nasascholarship/index.htm

Applications also are available in the Public Affairs Office, Rm. 108, Bldg. F-6.

The deadline for applications is March 20.

National Space Club Scholars Program

The National Space Club Scholars Program provides students an opportunity to experience how research and development organizations operate on a day-to-day basis. Participants will be assigned to work with a technical professional in a field related to the student's stated interests and expertise. Virtually all placements include computer applications.

Applications are currently being accepted and must be postmarked no later than February 17. Selected students will participate in a six week internship at Wallops from Monday, June 29 through Friday, August 7, 2009

For applications contact Rebecca Powell at x1139 or Rebecca.H.Powell@nasa.gov For further information on the program visit: education.gsfc.nasa.gov/files/spaceclub.pdf

"If you are NOT criticized, you may not be doing much,"
.....Donald H. Rumsfeld

Wallops Shorts.....

Balloons over Antarctica

The University of Hawaii Manoa's, ANITA, mission is complete after a flight that lasted 30 days and 15 hours.

The super pressure balloon has more than 29 days of flight time and is maintaining float altitude. View the balloon's track online at: http://www.csbf.nasa.gov/antarctica/ice0809.htm

On the Road

Dwayne Morgan, NASA Electrical Engineering Branch, participated in a Career Day event at Salisbury Christian School on January 15.

Wallops Black History Club

January 27
11 a.m. to 12:30 p.m.
Bldg. E-2, Cafeteria Entrance

Electric Consumption Rankings Dec. 21, 2008 to Jan. 20, 2009

As compared to the same period a year ago.

Overall Rankings

1.	E-134	-44.8 %
2.	F-10	-29.9 %
3.	Z-65	-25.4 %
4.	X-15	-24.3 %
5.	X-55	-21.2 %
6.	X-35	-18.4 %
7.	Z-40	-13.8 %
8.	F-4	-13.2 %
9.	Y-15	-10.2 %
10.	B-129	-9.3 %
11.	M-20	-8.4 %
12.	E-2	-8.1 %
13.	X-75	-8.0 %
14.	F-19	-6.6 %
15.	E-7	-4.7 %
16.	D-8	-4.6 %
17.	E-109	-3.9 %
18.	F-1	-3.1 %
19.	E-104	-2.5 %
20.	E-100	-1.4 %
21.	F-5	-0.5 %
22.	D-10	+1.5 %
23.	F-3	+3.6 %
24.	V-24	+3.9 %
25.	N-162	+4.4 %
26.	AEGIS	+4.7 %
27.	N-159	+5.9 %
28.	M-15	+7.3 %
29.	E-106	+7.5 %
30.	B-31	+8.5 %
31.	V-50	+11.1 %
32.	E-107	+13.7 %
33.	W-20	+13.8 %
34.	E-105	+13.9 %
35.	A-1	+16.3 %
36.	N-161	+17.1 %
37.	F-160	+17.6 %
38.	W-40	+19.8 %
39.	D-1	+24.4 %
40.	F-6	+26.8 %
41.	F-16	+28.8 %
42.	W-15	+30.1 %
43.	F-7	+40.7 %
44.	F-2	+47.2 %
45.	N-222	+75.9 %
46.	W-65	+131.4 %
47.	H-100	+1039.4 %

The Wallops Exchange & Morale Association (WEMA) and V.T. Griffin appreciate your participation in the annual Cell Phones for Life drive to collect 100 used cell phones.

Seventy-four phones along with various accessories were collected. These phones will be reconditioned and donated to the elderly, the disabled, and women in battered women's' shelters for emergency use.

Inside Wallops is an official publication of Goddard Space Flight Center and is published by the Public Affairs Office, x1584, in the interest of Wallops employees. Recent and past issues of *Inside Wallops* also may be found at: http://www.nasa.gov/centers/wallops/news/newsletters.html

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